

Appl. No. 09/776,298 Amdt. Dated March 10, 2004 Reply to Office action of April 1, 2003 PATENT AF
RESPONSE UNDER 37 C.F.R. \$1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 1724

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for removing metals from an aqueous solution comprising the steps of:

distributing at least one lithic neutralizing agent and at least one lithic precipitating agent to preferentially precipitate said metals from said aqueous solution onto the precipitating agent; and

contacting said aqueous solution with <u>said</u> at least one lithic neutralizing agent and <u>said</u> at least one lithic precipitating agent that preferentially precipitates metals from the aqueous solution.

Claim 2 (original): The process of claim 1, wherein the at least one neutralizing agent is selected from the group consisting of limestone, marble, calcium carbonate, calcite, dolostone and dolomite.

Claim 3 (previously presented): A process for removing metals from an aqueous solution comprising the steps of:

contacting said aqueous solution with at least one lithic neutralizing agent and at least one lithic precipitating agent that preferentially precipitates metals from the aqueous solution, wherein the at least one precipitating agent is selected from the group consisting of sandstone, quartz, siltstone, quartzarenite, arkose, shale, feldspar, illite, gravel, granite, basalt, conglomerate, schist, slate, gnesis, diorite, gabbro, and ryholite.



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Claim 4 (original): The process of claim 1, wherein the metals are selected from the group consisting of iron, iron oxide, silica, aluminum oxide, magnesium oxide, copper oxide, chromium oxide, nickel oxide, lead oxide, zinc, zinc oxide, aluminum, magnesium, cadmium, copper, chromium, nickel, lead.

Claim 5 (original): The process of claim 1, wherein said step of contacting an aqueous solution involves adding the at least one neutralizing agent and at least one precipitating agent to a natural stream of water.

Claim 6 (canceled)

Claim 7 (previously presented): The process of claim 5, wherein the at least one neutralizing agent and at least one precipitating agent are added in gravel form.

Claim 8 (original): The process of claim 1, wherein said step of contacting an aqueous solution involves passing the aqueous solution through a pipe that includes both the at least one neutralizing agent and the at least one precipitating agent.

Claim 9 (previously presented): The process of claim 8, wherein the at least one neutralizing agent and the at least one precipitating agent are provided in the pipe as a mixture of pieces of the at least one neutralizing agent and the at least one precipitating agent.

Claim 10 (previously presented): The process of claim 8, wherein the at least one neutralizing agent and the at least one precipitating agent are provided in the pipe as alternating rings.



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Claim 11 (previously presented): The process of claim 8, wherein said step of contacting an aqueous solution includes utilizing a pump to urge the aqueous solution through the pipe.

Claim 12 (New): A process for removing metals from an aqueous solution comprising the steps of:

providing a lithic neutralizing agent and a lithic precipitating agent;

exposing the aqueous solution to a surface of each of the neutralizing agent and the precipitating agent; and

preferentially precipitating the metals from the aqueous solution on the precipitating agent relative to the neutralizing agent.

Claim 13 (New): A process for removing metals from an aqueous solution comprising the steps of:

providing at least one neutralizing agent and at least one precipitating agent in a pipe as alternating rings;

passing the aqueous solution through the pipe that includes both the at least one neutralizing agent and the at least one precipitating agent; and

contacting said aqueous solution with the at least one lithic neutralizing agent and the at least one lithic precipitating agent that preferentially precipitates metals from the aqueous solution.